

A COMPREHENSIVE STUDY ON FACTORS INFLUENCING MORBIDITY AND MORTALITY IN PATIENTS UNDERGOING BOWEL RESECTION AND ANASTOMOSIS

INTRODUCTION:

- The bowel anastomosis is a surgical procedure to establish communication between the two formerly distant portions of the bowel. There intestinal continuity is restored after removal of a pathological condition affecting the intestine .
- Intestinal anastomosis is one of the most commonly done surgical procedures, both in emergency and elective setting when the resection are carried out for both benign and malignant lesions of the gastrointestinal tract.
- Intestinal anastomosis can be performed either by hand-sewn technique using absorbable and non-absorbable sutures or by stapling device, suture anastomosis (hand-sewn technique) is the commonly done procedure because of the easy availability and affordability of suture materials and familiarity with procedure.
- Stapling device for anastomosis provides an alternative option to perform a rapid anastomosis with the drawbacks of higher cost, limited availability and less familiarity among the surgeons .

- The principles of the good anastomosis are adequate exposure and access, adequate blood supply of both proximal and distal bowel, avoid gross fecal Contamination or sepsis, suture and proper stapler application by placing and approximation of all layer of intestinal wall, with no tension anastomosis, and prevent distal obstruction due to narrow lumen, good nutritional condition of the patient and adequate large bowel preparation in case of elective surgery.

AIMS & OBJECTIVES:

- 1.To study about factors affecting outcome in patients undergoing bowel resection and anastomosis.
- 2.To study the incidence of complications (postop ileus wound infection ,etc)
3. To study the mortality rates for intestinal anastomosis.

MATERIALS AND METHODS

- (a) Study design: Prospective Descriptive study
- (b) Study population: 50 Cases admitted in the Department of Surgery, Stanley medical college, Chennai .
- (c) Inclusion criteria: Age >20 to <65 years

Who undergoes primary intestinal resection and anastomosis.

(d) Exclusion criteria: patients undergoing initial diversion and later reanastomosis and combined hepatobiliary procedures.

(e) Subject withdrawal: patients who went against medical advice without any treatment.

(f) Period of study: one year (jan 2015 - sep2015)

(g) Study methods: Clinical examination, biochemical, observations during surgery and their follow up are methods used in this study.

Operative details shall include the indication of surgery, contaminated or non contamination , type of anastomosis , technique used and lastly postop complications.

Post operative morbidity is defined in terms of the duration of hospital stay and associated complications following surgery. The observer will be present for 50 cases through out the initial evaluation, resuscitation and surgical procedure, information of the cases will be obtained from case records also.

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STATISTICAL METHODS :

The data analyses will be made statistically using Chi square test to find the relation between various factors and anastomosis , using Microsoft software SPSS to arrive at the conclusion regarding the objective of the study.

CONCLUSION

- Intestinal anastomosis being a common surgical procedure in elective as well emergency is influenced by various factors both technically and nutritionally .
- In our study there is significant relation between hemoglobin , serum albumin levels of patient and their outcomes which increases the morbidity.
- So nutritional status should be improved in patients especially undergoing elective surgery before posting for surgery.
- There are also other individual personal factors such as smoking & alcohol history and skill related factors such as mean operative time , intraop blood loss, etc which will affect the outcome , should also be considered.
- Regarding the technique , both hand sewn and stapler was equally good in our study.
- Lethal post operative complication such as bleeding and anastomotic leak was not encountered in the study.
- And the mortality rate in our study group is also low , which is 2%.

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